



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/602,888      | 06/25/2003  | Szuping Lu           | 018940-023          | 2267             |

7590

09/01/2006

Burns, Doane, Swecker & Mathis, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                  |  |
|------------------------------|--------------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/602,888 | <b>Applicant(s)</b><br>LU ET AL. |  |
|                              | <b>Examiner</b><br>Robert Sellers    | <b>Art Unit</b><br>1712          |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Nos. 5-171103 (Japanese '103) or 3-179067 (Japanese '067).

Claims 10 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabuta et al. Patent No. 6,313,221 in view of Japanese '103 and '067.

Claims 10, 12-14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki Patent No. 6,767,987.

Claim 17 denoting from 10 to 65 weight% of glycidyl (meth)acrylate has been removed from this rejection and applied hereinbelow since Acrylic polyol resin (VIIA4) shown in column 138, lines 1-6 employs 4.9 weight% of glycidyl methacrylate.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki.

1. Although Acrylic polyol resin (VIIA4) contains only 4.9 weight% of glycidyl methacrylate, Okazaki is open to as much as from 10-60 weight% of glycidyl methacrylate according to column 97, lines 56-58. It would have been obvious to copolymerize the acrylic polyepoxide (B') of Okazaki with a content of the preferred glycidyl methacrylate (col. 97, lines 2-5) within the disclosed range in order to optimize the curability (col. 97, lines 20-22).

The rejections are maintained for the reasons of record set forth in the non-Final rejections mailed August 24, 2005 and March 13, 2006. The arguments filed August 14, 2006 have been considered but are unpersuasive.

Art Unit: 1712

2. The claims are directed to “[a] glycidyl (meth)acrylate based resin **for a powder coating composition . . . wherein the powder coating composition is a powder** [emphasis added].” The limitation merely redundantly specifies that the powder coating is in the form of a powder when the glycidyl (meth)acrylate based resin is utilized in a powder coating composition. There remains no requirement that the glycidyl (meth)acrylate based resin actually be present in a powder coating such as the suggested language of “A powder coating composition comprising a glycidyl (meth)acrylate resin . . .” Accordingly, there remains no distinction between the claimed glycidyl (meth)acrylate resin and the glycidyl (meth)acrylate resin-containing liquid coating formulations of Japanese ‘103 and ‘067 and Okazaki. Yabuta et al. sets forth a powder coating.

3. CAPLUS accession nos. 1994:166957 for Japanese ‘103 and 1992:409913 for Japanese ‘067 have been obtained to clarify the teachings from the awkwardly translated examples. According to these abstracts, Japanese ‘103 shows a glycidyl methacrylate copolymer prepared from 56.8% by weight of glycidyl methacrylate, 17.4% by weight of Placel FM 1 caprolactone (meth)acrylate monomer and 22.7% by weight of a mixture of the claimed styrene and butyl acrylate. Japanese ‘067 exhibits a glycidyl methacrylate copolymer derived from 30% by weight of glycidyl methacrylate, 20% by weight of Placel FM 2 caprolactone (meth)acrylate monomer and 30% by weight of the claimed styrene. Thus, the types and proportions of monomers defined by the claims is exemplified in Japanese ‘103 and ‘067.

Art Unit: 1712

4. Yabuta et al. in column 22, Table 3, shows a copolymer polymerized from 45% by weight of glycidyl methacrylate, 3% by weight of 2-hydroxyethyl methacrylate and 20% by weight of styrene within the ambit of claimed ethylenically unsaturated monomer (c). Therefore, the combination of glycidyl methacrylate with a hydroxyl-containing monomer is not merely within a long list of monomers, but is specifically exemplified. It would have been obvious to employ a particular hydroxyl-containing monomer such as the Placcel FM 1 or 2 of Japanese '103 or '067 which is also explicitly disclosed in Yabuta et al. (col. 5, lines 9-15) in order to impart flexibility.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

(571) 272-1093 (Fax No. (571) 273-8300  
Monday to Friday, 9:30 to 6:00

rs 8/20/2006



ROBERT E.L. SELLERS  
PRIMARY EXAMINER